

THE SEARCH FOR *ERIOSTEMON FALCATUS*, A PRESUMED EXTINCT SPECIES FROM SOUTHERN WESTERN AUSTRALIA

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ABSTRACT

Problems were encountered during attempts to relocate the presumed extinct *Eriostemon falcatus* in southern Western Australia. These have clouded search efforts which it seems sensible to clarify.

INTRODUCTION

Since 1990, I have maintained an interest in the presumed extinct *Eriostemon falcatus*, because of the discovery in that year of two related taxa (see Mollemans 1993), and have carried out privately funded research in attempts to relocate the species. This note details one aspect of the search which has been a distraction, i.e. the problem of whether two populations or just one existed in the past or possibly even still exist. It is important to settle this issue.

DISCUSSION

In October 1931, W.E. Blackall collected a small, white flowered compact 6–10 inch shrub (Blackall 917: PERTH), which he first determined as *Eriostemon* (sic) *deformis*, then *E. sp. nov.* and then *E. brevifolius*, at 17 miles (27.2

kilometres) from Southern Cross on the road to the "Miners' Settlement" (= "17 miles ditto": W.E. Blackall Field Notes: PERTH); Blackall's notes are not clear on the "Miners' Settlement" locality, but it is known to be near Yellowdine. Wilson (1970) described *Eriostemon falcatus* from the Blackall collection, with the specific epithet *falcatus* in reference to the sickle-shaped leaves.

Although searched for at the type locality "near Yellowdine" and elsewhere, *E. falcatus* has not been recorded again since 1931, i.e. for at least 50 years, which resulted in it being presumed extinct (Leigh *et al.* 1981, Briggs and Leigh 1988). The Endangered Flora Consultative Committee, which recommends species for gazettal to the Environment Minister (Anon 1993), after the required searches have been made, considered gazettal of *E. falcatus* as a presumed extinct species in 1991 and took account of

the three unsuccessful searches I had made near Yellowdine during Merredin District rare and endangered flora investigations in 1990 (see Mollemans *et al.* 1993) before recommending gazettal. *E. falcatus* was gazetted as presumed extinct in 1991.

The first issue needing clarification is whether two or one populations existed in the past or still exist. Hopper *et al.* (1990) recorded the type locality as Yellowdine, but also referred to the possibility of a collection from north of Salmon Gums, as did Marchant and Keighery (1979) when they reported two known specimens and considered *E. falcatus* poorly collected (their Category D).

Wilson (pers. comm.) discounted the Salmon gums record and suggested (and see his notes, Blackall collection herbarium sheet, PERTH) that a piece of the specimen from the type locality dropped from the plant press, was discovered, and was put back in the wrong place. This is supported by Blackall's field notes which don't record a second collection of the same *Eristemon*, and he seems to have been quite meticulous in recording his collections from the October, 1931 field trip. The two specimens are identical in characteristics, so Wilson's suggestion is plausible, but unless Blackall himself made this suggestion, it is difficult to judge, as *Eremophila interstans* (S. Moore) Diels (R.J. Chinnock, pers. comm.) and *Eriostemon linearis* Cunn. ex Endl. (Mollemans, unpubl. data) collections, for example, from eastern and western Australia populations are also identical in characteristics, leaving the possibility, however

small, of the specimens being from different populations.

Hopper *et al.* (1990) and Marchant and Keighery (1979) appear to agree, as their publications post-date Wilson's (1970) revisionary studies in which *E. falcatus* was described. However, logic would suggest it highly improbable that both populations could only have been collected once, within a week or so of each other, in the same field trip, by the same collector, in October 1931, and not be collected from since. No other similar occurrences are known to me.

On this basis, persistence of the record of *E. falcatus* from north of Salmon Gums seems unwarranted, and should be eliminated. Its persistence (as recently as 1990) has been unfortunate as it has clouded the search. *E. falcatus* should therefore be considered to have been recorded only from the type locality near Yellowdine, which in itself is problematic as Blackall's field notes are vague as to the precise collection locality, leading to several different interpretations (Wilson 1970; Marchant and Keighery 1979, Leigh *et al.* 1981, Leigh *et al.* 1984, Hopper *et al.* 1990). This aspect requires further discussion.

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